

**Upgrade
Instructions**

hp StorageWorks Edge Switch 2/12 Flexport

Third Edition (September 2004)

Part Number: AA-RV14C-TE/958-000339-002

These instructions describe how to install the 4-flexport upgrade kit in an Edge Switch 2/12.



© Copyright 2002-2004 Hewlett-Packard Development Company, L.P.

Hewlett-Packard Company makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information, which is protected by copyright. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of Hewlett-Packard. The information contained in this document is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Hewlett-Packard Company shall not be liable for technical or editorial errors or omissions contained herein. The information is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Hewlett-Packard Company products are set forth in the express limited warranty statements for such products. Nothing herein should be construed as constituting an additional warranty.

Printed in the U.S.A

Edge Switch 2/12 Flexport Upgrade Instructions
Third Edition (September 2004)
Part Number: AA-RV14C-TE/958-000339-002

Contents

About this Guide	5
Overview	6
Intended Audience	6
Related Documentation	6
Conventions	7
Document Conventions	7
Text Symbols	7
Equipment Symbols	8
Rack Stability	9
Getting Help	10
HP Technical Support	10
HP Storage Web Site	10
HP Authorized Reseller	10
1 Flexport Upgrade Instructions	11
Unpacking and Inspecting the Optics	12
Upgrading the Edge Switch 2/12	13
Upgrading to 8 Ports	13
Upgrading to 12 Ports	13
Obtaining and Configuring Feature Keys	14
Obtaining Feature Keys	14
Installing Feature Keys	15

About This Guide

These flexport upgrade instructions provide information to help you:

- Install the 8-flexport upgrade kit for the HP StorageWorks Edge Switch 2/12.
- Obtain and configure a required feature key.

“About this Guide” topics include:

- [Overview](#), page 6
- [Conventions](#), page 7
- [Rack Stability](#), page 9
- [Getting Help](#), page 10

Overview

This section covers the following topics:

- [Intended Audience](#)
- [Related Documentation](#)

Intended Audience

This book is intended for use by administrators who are experienced with the following:

- Fibre Channel technology
- HP StorageWorks Fibre Channel switches

Related Documentation

For a list of corresponding documentation, see the Related Documents section of the *HP StorageWorks Edge Switch 2/12 Release Notes*.

For the latest information, documentation, and firmware releases, please visit the HP StorageWorks website:

<http://h18006.www1.hp.com/storage/saninfrastructure.html>

For information about Fibre Channel Standards, visit the Fibre Channel Industry Association website, located at <http://www.fibrechannel.org>.

Conventions

Conventions consist of the following:

- [Document Conventions](#)
- [Text Symbols](#)
- [Equipment Symbols](#)

Document Conventions

This document follows the conventions in [Table 1](#).

Table 1: Document conventions

Convention	Element
Blue text: Figure 1	Cross-reference links
Bold	Menu items, buttons, and key, tab, and box names
<i>Italics</i>	Text emphasis and document titles in body text
Monospace font	User input, commands, code, file and directory names, and system responses (output and messages)
<i>Monospace, italic font</i>	Command-line and code variables
Blue underlined sans serif font text (http://www.hp.com)	Web site addresses

Text Symbols

The following symbols may be found in the text of this guide. They have the following meanings:



WARNING: Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or death.



Caution: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or data.

Tip: Text in a tip provides additional help to readers by providing nonessential or optional techniques, procedures, or shortcuts.

Note: Text set off in this manner presents commentary, sidelights, or interesting points of information.

Equipment Symbols

The following equipment symbols may be found on hardware for which this guide pertains. They have the following meanings:



Any enclosed surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts.

WARNING: To reduce the risk of personal injury from electrical shock hazards, do not open this enclosure.



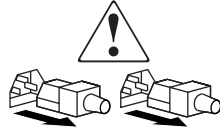
Any RJ-45 receptacle marked with these symbols indicates a network interface connection.

WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.



Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. Contact with this surface could result in injury.

WARNING: To reduce the risk of personal injury from a hot component, allow the surface to cool before touching.



Power supplies or systems marked with these symbols indicate the presence of multiple sources of power.

WARNING: To reduce the risk of personal injury from electrical shock, remove all power cords to completely disconnect power from the power supplies and systems.



Any product or assembly marked with these symbols indicates that the component exceeds the recommended weight for one individual to handle safely.

WARNING: To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manually handling material.

Rack Stability

Rack stability protects personnel and equipment.



WARNING: To reduce the risk of personal injury or damage to the equipment, be sure that:

- The leveling jacks are extended to the floor.
 - The full weight of the rack rests on the leveling jacks.
 - In single rack installations, the stabilizing feet are attached to the rack.
 - In multiple rack installations, the racks are coupled.
 - Only one rack component is extended at any time. A rack may become unstable if more than one rack component is extended for any reason.
-

Getting Help

If you still have a question after reading this guide, contact an HP authorized service provider or access our web site: <http://www.hp.com>.

HP Technical Support

Telephone numbers for worldwide technical support are listed on the following HP web site: <http://www.hp.com/support/>. From this web site, select the country of origin.

Note: For continuous quality improvement, calls may be recorded or monitored.

Be sure to have the following information available before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

HP Storage Web Site

The HP web site has the latest information on this product, as well as the latest drivers. Access storage at: <http://www.hp.com/country/us/eng/prodserv/storage.html>. From this web site, select the appropriate product or solution.

HP Authorized Reseller

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518
- In Canada, call 1-800-263-5868
- Elsewhere, see the HP web site for locations and telephone numbers: <http://www.hp.com>.

Flexport Upgrade Instructions

1

Read these instructions to upgrade the Edge Switch 2/12 from 4 ports to 8 ports and from 8 ports to 12 ports by installing the 4-flexport upgrade kit for the Edge Switch 2/12.

Each port expansion kit includes four small form factor pluggable (SFP) transceivers, these upgrade instructions, and an entitlement certificate which contains a registration number for obtaining a software license key (feature key). The feature key must be entered at the **Feature Installation** tab on the **Operations** page of the Embedded Web Server (EWS) for the specific switch, or through the command line interface (CLI).

Unpacking and Inspecting the Optics

Unpack and inspect the optics as follows:

- Inspect the shipping container for damage caused during transit. If a container is damaged, ensure that a representative from the freight carrier is present when the container is opened.
- Unpack the shipping container and inspect each item for damage. Ensure that all items listed on the enclosed bill of materials are included in the container.
- If any items are damaged or missing, contact a Hewlett-Packard authorized service provider or reseller.

Upgrading the Edge Switch 2/12

This section describes how to upgrade the Edge Switch 2/12 from 4 ports to 8 ports and from 8 ports to 12 ports.

Upgrading to 8 Ports

Ports 0 through 3 of the Edge Switch 2/12 are populated when you receive it (Figure 1, reference ③).

To upgrade to 8 ports:

1. Insert 4 new SFP transceivers into ports 4 through 7 (Figure 1, reference ②).
2. If you have no additional ports to upgrade, go to “[Obtaining and Configuring Feature Keys](#)” on page 14. If you want to install additional ports, continue with the “[Upgrading to 12 Ports](#)” on page 13.

Upgrading to 12 Ports

Ports 0 through 7 should be populated after you have completed the procedure described in “[Upgrading to 8 Ports](#)” on page 13 (Figure 1, reference ② and ③).

To upgrade to 12 ports:

1. Insert 4 new SFP transceivers into ports 8 through 11 (Figure 1, reference ①).

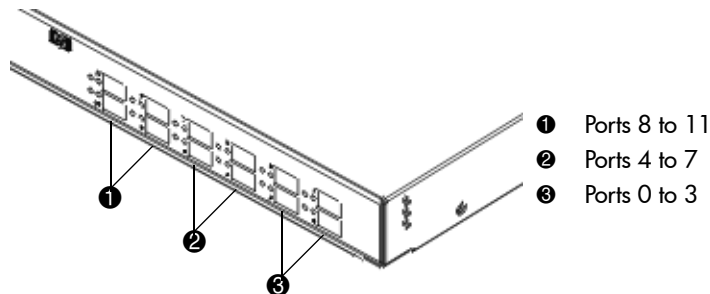


Figure 1: Edge Switch 2/12 port locations

2. Continue with “[Obtaining and Configuring Feature Keys](#)” on page 14.

Obtaining and Configuring Feature Keys

In order to configure the ports you have added, you need to obtain and configure a feature key. The following sections tell you how to obtain and configure the key.

Obtaining Feature Keys

To obtain the feature key for your flexport upgrade, complete the information requested on the *HP StorageWorks Fibre Channel Switches Entitlement Certificate* for firmware features. This certificate is included in the flexport upgrade kit. Next, send the information on the form to the Hewlett-Packard Authorization Center by using one of the following methods:

	Call the HP Authorization Center	Fax the completed form	E-mail
World Wide Web (24 x 7)	www.webkey.external.hp.com		
US & Canada 0600-1800 U.S. MST, M-F	(801) 431-1451 (800) 861-2979	(801) 431-3654	Americas_password@cnd.hp.com
Europe 0900-1800 Netherlands local time, M-F	+31-555-384-210	+31-555-434-645	Europe_password@cnd.hp.com
Asia 0600-1700 Japan local time, M-F	+81-03-3227-5289 +81-3-3227-5289 (outside Japan)	+81-03-3227-5289 +81-3-3227-5238 (outside Japan)	Asia_password@cnd.hp.com

The Hewlett-Packard Authorization Center uses the information that you send to create a unique software license key for your Edge Switch 2/12 4-port upgrade. It delivers the license key to you by the same method you use to send your information to the Authorization Center. For example, if you send your information by e-mail, the Authorization Center will send the license key to you by e-mail.

Note: Feature keys are encoded to work with the serial number of the installed switch only. Record the key to re-install the feature if required.
If the switch fails and must be replaced, obtain new feature keys from the HP Authorization Center using the methods described in section “[Obtaining Feature Keys](#)” on page 14. Please have the serial numbers of the failed and replacement switches.

Installing Feature Keys

Perform this procedure to install one or more of the following optional features:

- **Flexport Technology** - A Flexport Technology switch is delivered at a discount with only four ports enabled. When additional port capacity is required, the remaining ports are enabled (in four-port increments) through purchase of this feature.
- **Full-Fabric Capability** - This feature allows Fibre Channel ports to be configured as E_Ports, G_Ports, or GX_Ports.

After purchasing a feature, obtain the required feature key by following the enclosed instructions. A feature key is an alphanumeric string consisting of both uppercase and lowercase characters. The total number of characters may vary. The key is case sensitive and must be entered exactly, including dashes. The following is an example of a feature key format:

XxXx-XXxX-xxXX-xX.

The following procedure tells you how to configure the feature key using EWS. If you are using the CLI to configure the feature key, refer to the *HP StorageWorks CLI Reference Guide for Directors and Edge Switches*.

After obtaining the feature key, install the feature as follows:

1. At the **View** panel, click **Operations** at the left side of the panel. The **Operations** panel opens with the **Switch** page displayed.
2. Click **Feature Installation**. The **Operations** panel opens with the **Feature Installation** page displayed, as shown in [Figure 2](#).

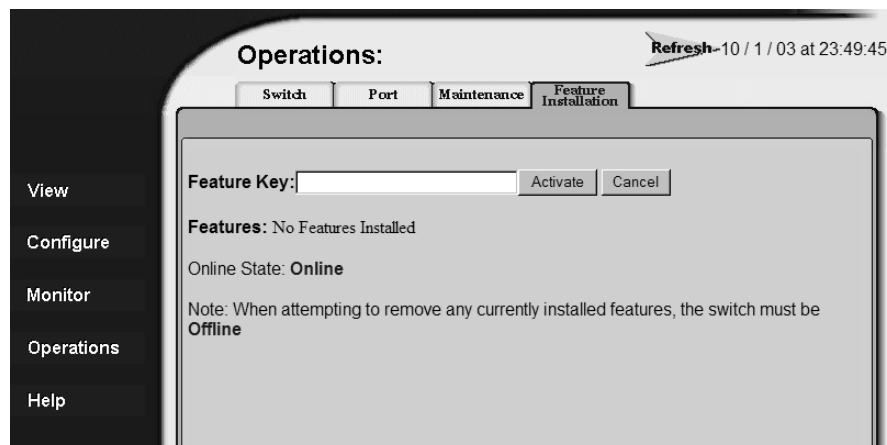


Figure 2: Operations page—Feature Installation tab

3. Type the feature key and click **Activate**. The interface displays a confirmation page with a warning, stating this action overrides the current set of switch features.
4. Click **Activate** to activate the new feature key. The switch performs an IPL when the key is activated.

Note: When **Activate** is selected, all current features are replaced with new features.

5. The feature key has successfully been installed.

Tables

1 Document conventions. 7

